

1.0 INTRODUCTION

This RCRA Facilities Investigation (RFI) Report is in response to the requirements of Administrative Order (AO) No. III-011-AM between the United States Environmental Protection Agency (USEPA) and Bethlehem Steel Corporation (BSC). The AO outlines the terms and conditions for this RFI. BSC submitted an RFI Work Plan to the USEPA, Region III which the Agency approved in November 1989. BSC contracted Dames & Moore to conduct the RFI in December 1989.

The RCRA facility assessment report of August 29, 1986 identified 34 Solid Waste Management Units (SWMUs 1-34) at the Steelton Plant of which three units are RCRA-regulated (18-20) and are classified as Hazardous Waste Management (HWM) units. Seven SWMUs were deleted from investigation by the USEPA because they were not found to have contained hazardous constituents. The approved RFI Work Plan required the investigation of 27 of the SWMUs at the Steelton Plant (Table 1-1). A map showing the locations of these units is included here as Figure 1. In accordance with the approved RFI Work Plan, BSC submitted a Historical Investigation Report (HIR) on 18 of the 27 Solid Waste Management Units on March 7, 1990 (Table 1-1). The HIR identified 5 SWMUs (SWMUs 4, 13, 14, 15, and 16) that appear to have historically prevented the release of Potential Constituents of Concern (PCOCs) and were therefore excluded from further investigation.

Based on results from the historical investigation, BSC submitted a proposal to USEPA to modify the RFI Work Plan on March 7, 1990. In addition, BSC submitted a modified Quality Assurance Project Plan (Volume 5) (QAPP) to Region III Central Laboratory on March 7, 1990. The field investigation commenced at that time based on verbal approvals of the RFI Work Plan and QAPP modifications. BSC received written approval for the RFI Work Plan modifications and revisions to the QAPP in a letter from the USEPA (Mr. Robert E. Greaves) dated May 9, 1990.

Where applicable, Dames & Moore compared concentrations of PCOCs in aqueous samples to National Primary Drinking Water Standards to evaluate risk. Dames & Moore developed Site-specific action levels for solids and generated action levels for each SWMU using risk assessment equations provided by Dr. Roy Smith, Toxicologist with the USEPA, Region III and has also employed a leaching potential model (The Summers Model) to evaluate the potential for PLOC's in migrate to groundwater. Dames & Moore used these action levels to identify the SWMUs that require additional investigation. The RFI Report includes these conclusions. Two separate documents submitted with this RFI Report and incorporated herein by reference are: "Risk Assessment, RCRA Facility Investigation, Bethlehem Steel Corporation's Steelton, Pennsylvania Facility, September 1991." and Ecological Evaluation Report, RCRA Facility Investigation, Bethlehem Steel Corporation, Steelton, Pennsylvania.

TABLE 1-1
SOLID WASTE MANAGEMENT UNITS IDENTIFIED IN
THE RFI WORK PLAN

Unit Number	SWMU Description
1-3	Waste Water Settling Basin *
4	Settling Basin Sump *
5-7	Wastewater Treatment Lagoons *
8	Wastewater Polishing Lagoon *
9	Central Waste Oil Storage Tank *
10	Continuous Caster Heavy Scale Pit *
11	Continuous Caster Fine Scale Pit *
12	Pipe Mill Oil Separator
13	Pipe Mill Expander Pit *
14	Small Rolling Mill Scale Pit *
15	Medium Rolling Mill Scale Pit *
16	Large Rolling Mill Scale Pit *
18	HWM1 Landfill
20	HWM3 Pelletizer *
21	Pelletizer Run-off Tank
22	No. 2 Pelletizer *
24	Electric Arc Furnace Spray Chambers Drop Legs
25	Steel Foundry Electric Furnace Baghouse Bin
29	Frog and Switch Grinder Cyclone Holding Room
30	Residual Landfill
31-32	Caustic Waste Rinse Water Tanks
34	Plant Canal *

* Included in Historical Investigation.